

Appl. No. 09/917,469
Atty. Docket No. CM2017MC
Amdt. dated August 18, 2003
Reply to Final Office Action of June 17, 2003
Customer No. 27752

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended) An adhesive for a disposable absorbent article:

said disposable absorbent article comprising a wearer facing surface and a garment facing surface opposed thereto;

said adhesive covering at least a portion of said wearer facing surface;

said adhesive having an initial peel strength (P_i);

wherein said adhesive has a final peel strength (P_f) after exposure to water;

wherein the ratio of P_i to P_f is in the range of 2:1 to 2:4;

wherein said adhesive comprises at least one non-emulsified homogeneous phase[[.]] or at least one emulsified phase wherein all at least one of said phases having have a thickness greater than 50 μm ;

wherein said adhesive has a water absorption capacity of at least 3% by weight of said adhesive; and,

wherein said adhesive comprises at least 3% water after one hour of equilibration at 50% relative humidity.

Claim 2 (Original) The adhesive of Claim 1, wherein said ratio of P_i to P_f ranges from 2:1.25 to 2:2.

Claim 3 (Original) The adhesive of Claim 1, wherein said initial peel strength (P_i) of said adhesive ranges from 0.1N/cm to 5.0N/cm.

Claim 4 (Original) The adhesive of Claim 3, wherein said initial peel strength (P_i) of said adhesive ranges from 0.5N/cm to 3.0N/cm.

Claim 5 (Previously Presented) The adhesive of Claim 1, wherein:

said adhesive is provided as a layer having a thickness C in millimeters;

wherein said adhesive has a viscous modulus at a temperature of 25°C ($G''_{25}(100 \text{ rad/sec})$); and,

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wherein said viscous modulus ($G''_{25}(100 \text{ rad/sec})$) is defined by the equation:

$$G''_{25} \leq [(7.00 + C) \times 3000] \text{ Pa.}$$

Claim 6 (Previously Presented) The adhesive of Claim 5, wherein:

said viscous modulus ($G''_{25}(100 \text{ rad/sec})$) is defined by the equation:

$$G''_{25} \leq [(5.50 + C) \times 1700] \text{ Pa.}$$

Claim 7 (Original) The adhesive of Claim 1, wherein:

said adhesive has an elastic modulus at a temperature of 37°C ($G'_{37}(1 \text{ rad/sec})$) and a viscous modulus at a temperature of 37°C ($G''_{37}(1 \text{ rad/sec})$);

wherein $G'_{37}(1 \text{ rad/sec})$ ranges from 500 Pa to 20000 Pa;

wherein $G''_{37}(1 \text{ rad/sec})$ ranges from 100 Pa to 15000 Pa; and,

wherein the ratio $G'_{37}(1 \text{ rad/sec}) / G''_{37}(1 \text{ rad/sec})$ ranges from 1 to 30.

Claim 8 (Original) The adhesive of Claim 7 wherein:

$G'_{37}(1 \text{ rad/sec})$ ranges from 700 Pa to 15000 Pa; and,

wherein $G''_{37}(1 \text{ rad/sec})$ ranges from 100 Pa to 10000 Pa.

Claim 9 (Original) The adhesive of Claim 8 wherein:

$G'_{37}(1 \text{ rad/sec})$ ranges from 1000 Pa to 10000 Pa; and,

wherein $G''_{37}(1 \text{ rad/sec})$ range from 300 Pa to 5000 Pa.

Claim 10 (Original) The adhesive of Claim 1, wherein said adhesive is a substantially water insoluble pressure sensitive adhesive comprising a polymer which forms a 3-dimensional matrix, and comprises less than 10% hydrocolloid particles by weight of said adhesive.

Claim 11 (Previously Presented) The adhesive of Claim 10, wherein said adhesive comprises less than 5% hydrocolloid particles by weight of said adhesive.

Claim 12 (Previously Presented) The adhesive of Claim 1, wherein said adhesive comprises:

a polymer selected from the group consisting of polyacrylics, sulphonated polymers, polyvinyl alcohols, polyvinyl pyrrolidine, polyethylene oxide, and mixtures thereof; and,

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a plasticizer selected from the group consisting of polyhydric alcohols, polyethylene glycols, sorbitol, water, and mixtures thereof.

Claim 13 (Original) The adhesive of Claim 12, wherein said adhesive is a hydrophilic-hydrophobic mixed phase adhesive.

Claim 14 (Original) The adhesive of Claim 1, wherein said wearer facing surface further comprises at least one non-adhesive portion.

Claim 15 (Original) The adhesive of Claim 1, wherein said adhesive is a continuous layer.

Claim 16 (Original) The adhesive of Claim 1, wherein said adhesive is applied to said wearer facing surface by slot coating.

Claim 17 (Original) The adhesive of Claim 1, wherein said article further comprises a release liner in contact with said adhesive.

Claim 18 (Original) The adhesive of Claim 1, wherein said article further comprises a topsheet in communication with said garment facing surface, a backsheet in communication with said topsheet, and an absorbent core disposed therebetween.

Claim 19 (Original) The adhesive of Claim 1, wherein said adhesive is applied to said wearing facing surface at a basis weight ranging from 20 g/m² to 2500 g/m².

Claim 20 (Original) The adhesive of Claim 19, wherein said adhesive is applied to said wearing facing surface at a basis weight ranging from 700 g/m² to 1500 g/m².

Claim 21 (Previously Presented) The adhesive of Claim 1, wherein said adhesive is formed by polymerizing a homogeneous aqueous reaction mixture comprising from 5% to 50% by weight of the reaction mixture of a hydrophilic monomer from 10% to 50% by weight of the reaction mixture of a plasticizer, and from 10% to 50% by weight of the reaction mixture of a non-ionic monomer, and from 3% to 40% by weight of the reaction mixture of water.